



# ***DARPA*Tech**

## ***2002 Symposium***

*Transforming*  
***Fantasy***



**Sam B. Wilson**  
Program Manager

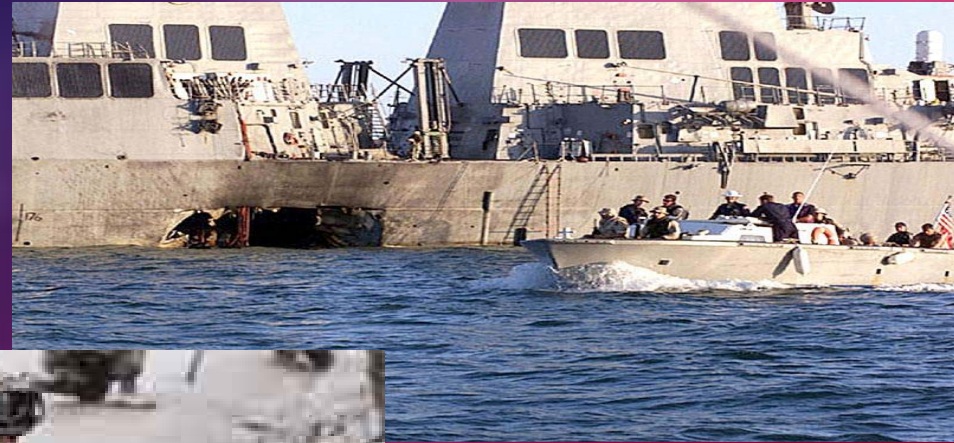


# Micro Aerial Vehicle (MAV) ACTD

Sam B. Wilson III



# Critical Military Need: Situational Awareness



# ACTD Operational Objective

## The Problem:

- ▶ Lack of situational awareness at the small unit level places the [tactical reconnaissance and surveillance] mission and soldiers at risk.

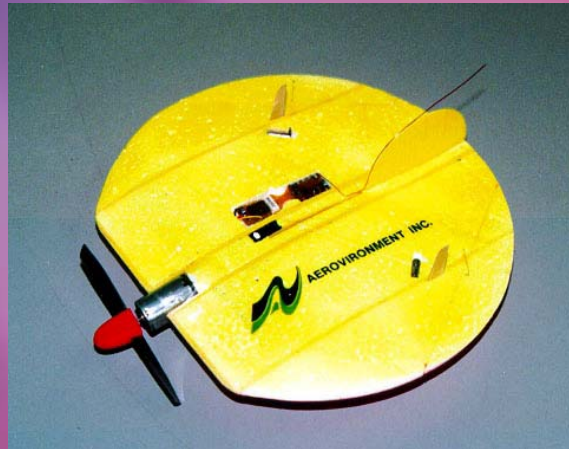
## The Solution:

- ▶ MAV technology greatly reduces the operational and tactical risks associated with small unit operations.

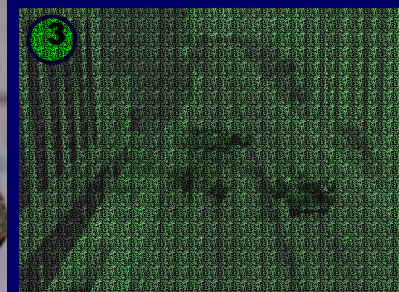
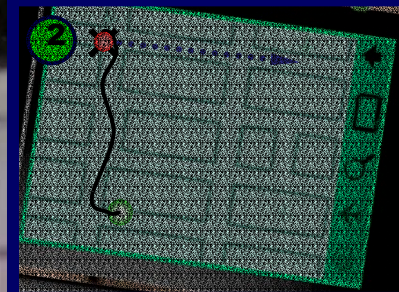
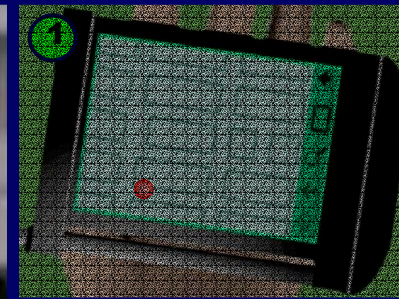
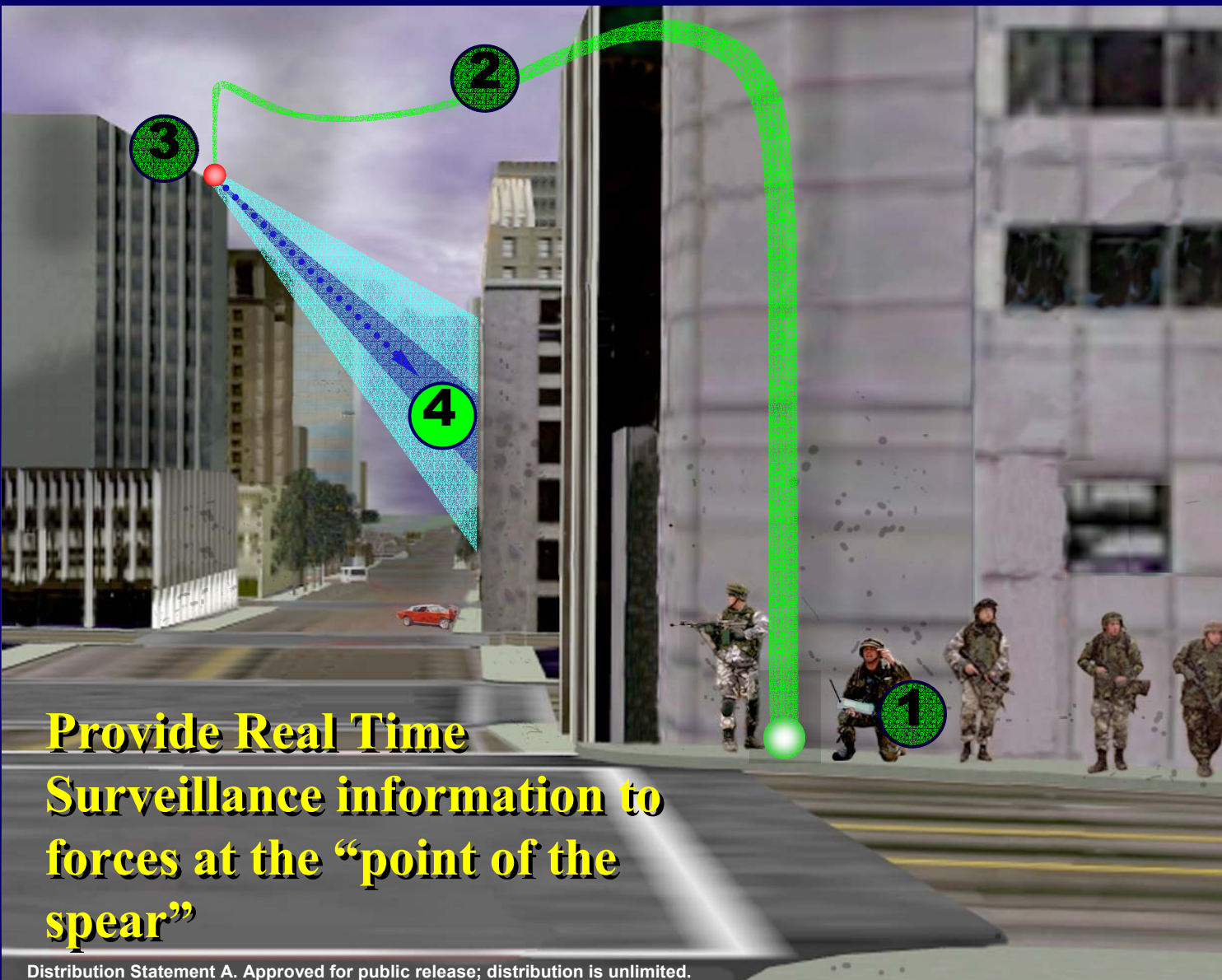


# Micro Air Vehicle Project

- ▶ Micro Air Vehicle: MAV
- ▶ Private Jones



# MAV Urban Environment Concept of Operations



**Provide Real Time  
Surveillance information to  
forces at the “point of the  
spear”**

# Goal: Launch & Learn

ACTD

**New Paradigm:  
Soldier  
Supervised**

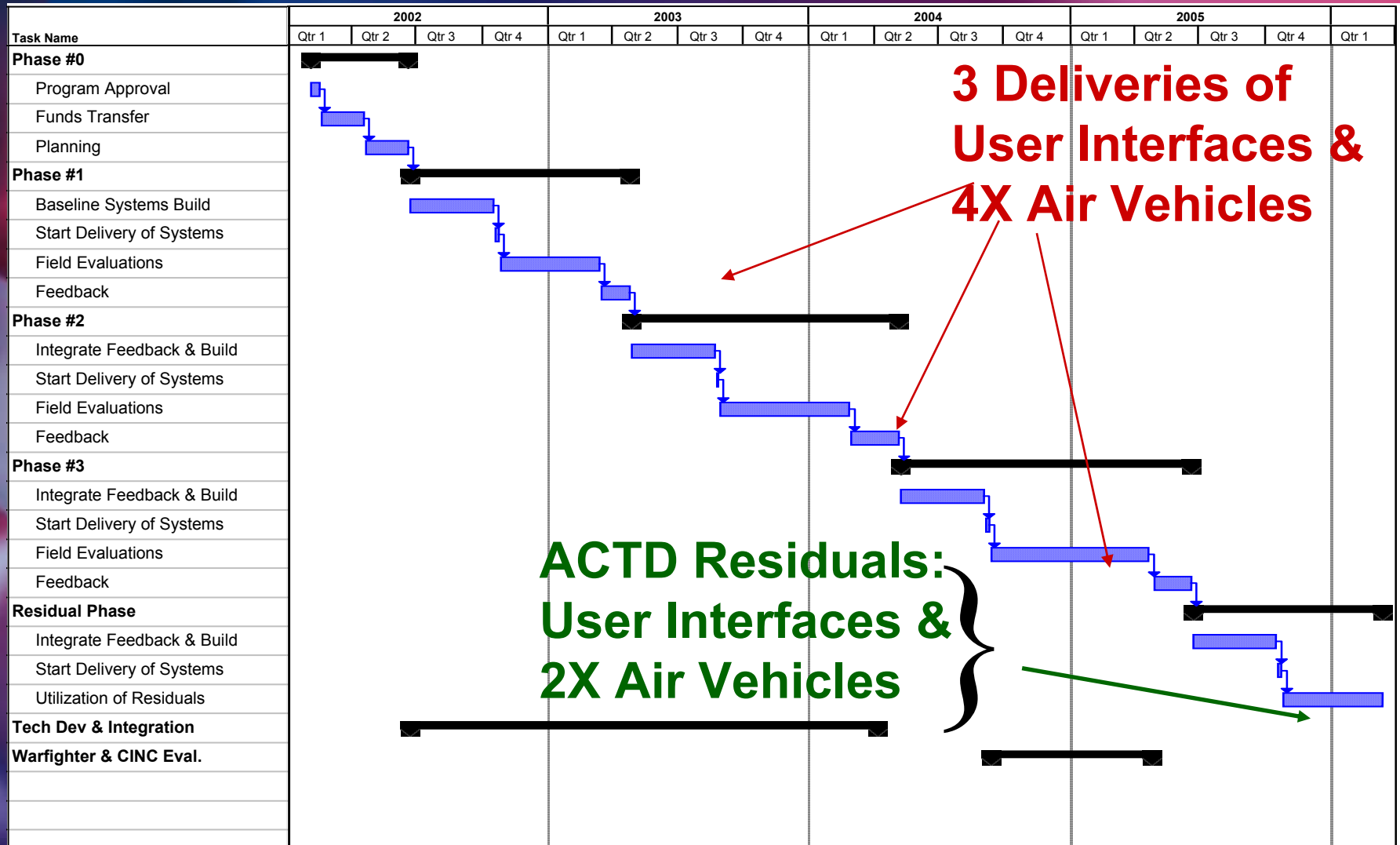
Autonomous Flight



# Participants and Roles



# Program Schedule





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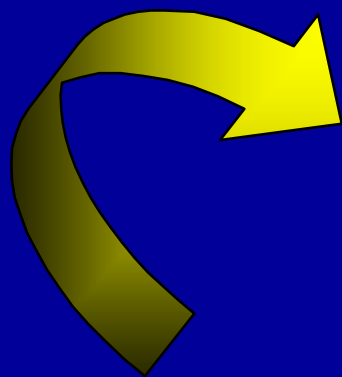
*Transforming*  
***Fantasy***



# User Interface & Imagery Issues

ACTD

## Goal: Launch & Learn (Autonomously)



### New Paradigm: Soldier Supervised



*Autonomous Flight*

### Old Paradigm: Pilot Required

*Tele-Operation*



### Analog to Digital Sensors



Closer for Clarity



Image Stability

